## LUNCH AND LEARN GANG: "Biodiesel Fuel –You Can Make Your Own!" April 3, 12-1:00 p.m. Region II Conference Room

Who would have thought that the day I began this write-up on biodiesel fuel, March 18, would be so appropriate? It just happened to be National Biodiesel Day and coincided with the date of Rudolf Christian Carl Diesel's birthday, in 1858, in Paris.

The biodiesel industry chose Diesel's birthday to honor him for his foresight in recognizing the valuable role of vegetable oil-based fuel. He originally designed the diesel engine in the late 19th Century to run on peanut oil. Only later did petroleum become the standard. In a 1912 speech, Diesel said "the use of vegetable oils for engine fuels may seem insignificant today, but such oils may become, in the course of time, as important as petroleum and the coal tar products of the present time."

What is biodiesel fuel? It is the fastest-growing alternative transportation fuel in the U.S. and is made from vegetable oils, animal fats, or greases such as recycled restaurant grease. Biodiesel fuels, often blended with petroleum diesel in varying ratios, are compatible with and can be used in unmodified diesel engines with the existing fuel infrastructure.

Why use it? Biodiesel is better for the environment because it is made from renewable resources (plant and animal oils) and has lower emissions compared to nonrenewable petroleum diesel. It is less toxic than table salt and biodegrades as fast as sugar. Since it is made in the U.S. from renewable resources such as soybeans, its use decreases our dependence on foreign oil and contributes to our own economy. Here in the U.S. we now use so much petroleum that we have to buy two-thirds of it from other countries.

Where do I get biodiesel? Biodiesel is available nationwide and can be purchased directly from biodiesel producers and marketers, petroleum distributors, or at a handful of public pumps throughout the nation. Or – you can make it in your own garage!

Bart and Atha Comiskey, of C & E Biodiesel of Nashville, our next Lunch and Learn Gang presenters, are dealers representing a home biodiesel production system, the FuelMeister II. About 5 years ago Bart decided that once fuel prices went to \$2 a gallon he was going to make a change and that change was how he fueled his 1995 diesel Mercedes. Now he makes his own fuel with the FuelMeister using waste vegetable oil from area restaurants. Today with diesel fuel prices in the \$4 range, he is still making his own fuel for well under \$1 a gallon!

Bart and Atha will tell us how you don't have to be a plumber or mechanic to

make your own biodiesel as this system comes with all the specialized equipment and supplies you need to start making biodiesel, within hours after you receive your system. All you need to add is vegetable oil, lye, methanol, electricity and tap water.

The systems comes with digital scales to accurately measure your own lye. The whole setup fits comfortably in the corner of your garage. And because it's a "closed" system you won't generate fumes or have to pour or stir any liquids. It will turn even heavily used cooking oil into clean burning, biodegradable and smooth-running biodiesel.

Don't miss this opportunity to ask the Comiskeys about how you can produce this earth-friendly alternative fuel for your diesel car, truck, tractor, generator or boat, and save money on those fuel bills!

Hosted by the I&E Department and held on the first Thursday of each month, except July, Lunch and Learn Gang presentations are about natural resource related topics and last about 30-45 minutes, allowing time for discussion during the allotted lunch hour. If you would like to make a presentation, if you have topics of personal interest you would like us to address, or if you know someone who offers an interesting program, contact Patricia Miller at (615) 781-5276 or by e-mail: Patricia.Miller@state.tn.us.